# Pluto-Kuiper Belt (PKB) Mission Concept Study & Downselect

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# **Concept Study Overview**

### PKB Mission AO, Section 1.2 and 6.3.2

- 2 month concept study is amended to be 3 months
- Funding of \$450K (real year dollars)
- NASA will evaluate implementing details, including
  - any modifications to science objectives
  - proposed cost to NASA OSS
  - design details of experiment hardware
  - plans for mission implementation including technical and management
  - details of E/PO, SDB, and technology transfer plans

## **Relevant Documents**

## PKB Mission Program Library

- http://centauri.larc.nasa.gov/pluto/pkblib.html
- Criteria and Guidelines for the Phase A Concept Study
- Example of Mission Definition and Requirements Agreement
- Example of an International Agreement

### Downselect 2001 Information

- http://centauri.larc.nasa.gov/pluto/downselect.html
- Downselect Guidelines updates
- Announcements regarding Downselection

# **Concept Study Report Evaluation**

- Program Scientist, Denis Bogan, will be the overall Chair of the Evaluation Team
- LaRC/Brad Perry will Co-Chair & lead the TMCO evaluation
- Final reports must be delivered to NPRS nlt 9/18/01 4:30 p.m. EDT
  - Signed Original and 60 copies
  - No late changes or errata sheets, no exceptions
  - NPRS address and contact information in AO
- Site Visits will be discussed by Brad Perry later in this meeting

# **Concept Study Report Content**

#### Selections were primarily based on Science Merit

- Unless Concept Study results demand it, Science should not change
- Science section from Proposal MUST be repeated in this Report
- Any and all Changes to be highlighted
- Unless Science changes, Downselection will now emphasize <u>implementation</u>: Technical Merit and Feasibility and TMCO

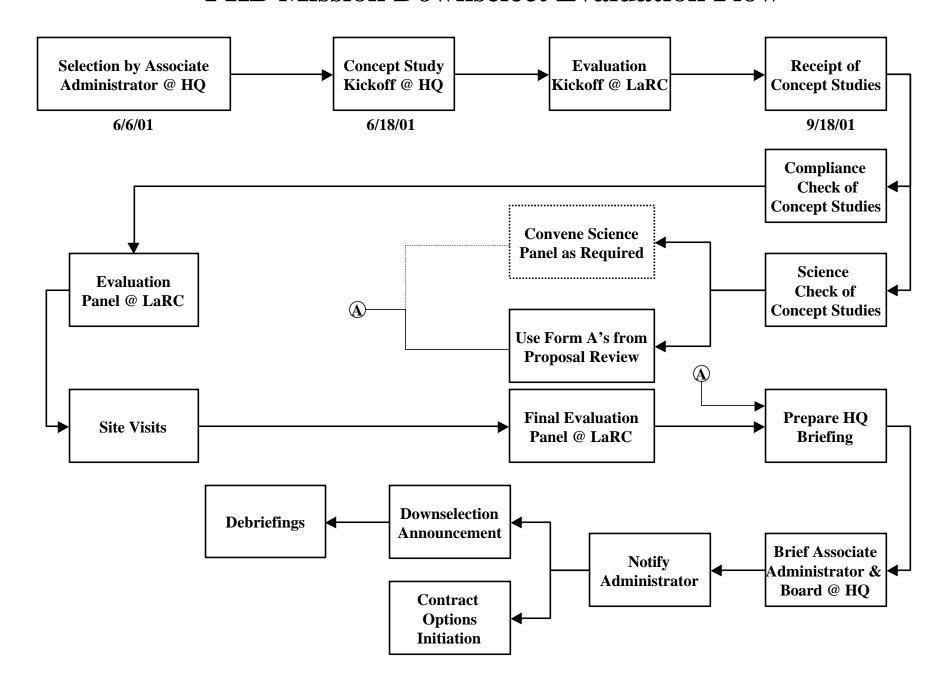
#### Technical Merit and Feasibility

- Details of instrument strategy, sensitivities, and implementation are required
- Block diagrams, instrument, and observation table should be updated with design details
- Details of Data Management are also required including analysis, archiving, publication, and release to public

## **Evaluation Criteria**

- 4 Evaluation Criteria for Concept Study (also AO §6.3.3, and reference to §6.2.1)
  - <u>Scientific Merit of Investigation</u>: Not reevaluated unless there is a change made
  - <u>Technical Merit and Feasibility of Science Implementation</u>: Per Concept Study Guidelines
  - <u>Feasibility of Implementation Scheme:</u> Per Concept Study Guidelines and discussed in TMCO section of Briefing
  - Quality of Education/Public Outreach, New Technology, and Small,
     Disadvantaged Business Plans: Per Concept Study Guidelines and discussed in TMCO section of Briefing
- <u>Total Mission Cost to NASA</u>: This is equal to <u>proposed cost</u> and is not evaluated. Note: It will be a <u>selection factor</u> and cannot increase from proposed cost by more than 20% or exceed the total \$500M cost cap.

#### **PKB Mission Downselect Evaluation Flow**



# **Competition Conditions**

- "Blackout" after the Kickoff Meeting
  - Communications after this meeting will be controlled
  - Technical and expert advice should be obtained directly from identified Points of Contact (POC's)
  - All programmatic questions, including questions of policy, questions of interpretation, and questions of clarification, should come to HQ/Denis Bogan
  - Answers if warranted will be provided via PKB Mission Acquisition Program Homepage and emailed to all PI's
  - Site visit details will be coordinated with LaRC/Brad Perry